

```
create database banking;
```

```
/*BRANCH (branch-name: String, branch-city: String, assets: real)
```

```
ACCOUNTS (accno: int, branch-name: String, balance: real)
```

```
DEPOSITOR (customer-name: String, customer-street: String, customer-city: String)
```

```
LOAN (loan-number: int, branch-name: String, amount: real)
```

```
BORROWER (customer-name: String, loan-number: int) */
```

```
use banking;
```

```
create table BRANCH(branch_name varchar(20),branch_city varchar(10),assets real,primary  
key(branch_name));
```

```
insert into BRANCH values('SBI_Chamrajpet','Bangalore',50000);
```

```
insert into BRANCH values('SBI_Residency road','Bangalore',10000);
```

```
insert into BRANCH values('SBI_shivajiroad','Bombay',20000);
```

```
insert into BRANCH values('SBI_parlimentroad','Delhi',10000);
```

```
insert into BRANCH values('SBI_jantarmentar','Delhi',20000);
```

```
commit;
```

```
select * from BRANCH;
```

```
create table ACCOUNTS(accno integer,branch_name varchar(20),balance real,primary  
key(accno),foreign key(branch_name) references BRANCH(branch_name));
```

```
insert into ACCOUNTS values('1','SBI_Chamrajpet','2000');
```

```
insert into ACCOUNTS values('2','SBI_Residency road','5000');
```

```
insert into ACCOUNTS values('3','SBI_shivajiroad','6000');
```

```
insert into ACCOUNTS values('4','SBI_parlimentroad','9000');
```

```
insert into ACCOUNTS values('5','SBI_jantarmentar','8000');
```

```
insert into ACCOUNTS values('6','SBI_shivajiroad','4000');
```

```
insert into ACCOUNTS values('8','SBI_Residency road','4000');
```

```
insert into ACCOUNTS values('9','SBI_parlimentroad','3000');
```

```
insert into ACCOUNTS values('10','SBI_Residency road','5000');
```

```
insert into ACCOUNTS values('11','SBI_jantarmentar','2000');
```

```
commit;
```

```
select * from ACCOUNTS;
```

```
create table BANKCUST(customername varchar(20),customerstreet varchar(30),customercity  
varchar(30),primary key(customername));
```

```
insert into BANKCUST values('AVINASH','Bulltemple','Bangalore');
```

```
insert into BANKCUST values('dinesh','banerghata','Bangalore');
```

```
insert into BANKCUST values('mohan','mgroad','Bangalore');
```

```
insert into BANKCUST values('nikhil','churchstreeet','Delhi');
```

```
insert into BANKCUST values('ravi','akbarroad','Delhi');
```

```
commit;
```

```
select * from BANKCUST;
```

```
create table DEPOSIT(customername varchar(20),accno integer,primary  
key(accno,customername),foreign key(accno) references ACCOUNTS(accno),foreign  
key(customername) references BANKCUST(customername));
```

```
insert into DEPOSIT values('AVINASH',1);
```

```
insert into DEPOSIT values('dinesh',2);
```

```
insert into DEPOSIT values('nikhil',4);
```

```
insert into DEPOSIT values('ravi',5);
```

```
insert into DEPOSIT values('AVINASH',8);
```

```
insert into DEPOSIT values('nikhil',9);
```

```
insert into DEPOSIT values('dinesh',10);
```

```
insert into DEPOSIT values('nikhil',11);
```

```
commit;
```

```
select * from DEPOSIT;
```

```
CREATE TABLE LOAN(loanno int,branch_name varchar(20),amt real,primary key(loanno),foreign  
key(branch_name) references BRANCH(branch_name));
```

```
insert into LOAN values(1,'SBI_Chamrajpet',1000);
```

```
insert into LOAN values(2,'SBI_Residency road',2000);
```

```
insert into LOAN values(3,'SBI_shivajiroad',3000);
```

```
insert into LOAN values(4,'SBI_parlimentroad',4000);
```

```
insert into LOAN values(5,'SBI_jantarmentar',5000);
```

```
commit;
```

```
select * from LOAN;
```

/*Find all the customers who have at least two accounts at the Main branch (ex. SBI_ResidencyRoad).

iv. Find all the customers who have an account at all the branches located in a specific city (Ex. Delhi).

v. Demonstrate how you delete all account tuples at every branch located in a specific city (Ex. Bombay). */

/*3*/

```
select customername from DEPOSIT d,ACCOUNTS a
where d.accno=a.accno
group by customername
having count(d.customername) >=2;
```

/*5*/

```
delete from ACCOUNTS
where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='Bombay');
Select * from ACCOUNTS;
```

/*4*/

```
select d.customername from DEPOSIT d,BRANCH b,ACCOUNTS a
where b.branch_name=a.branch_name
AND a.accno=d.accno
and branch_city='Delhi'
group by d.customername
HAVING COUNT(distinct b.branch_name)=(
    SELECT COUNT(branch_name)
    FROM branch
    WHERE branch_city='Delhi');
```

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No object selected

Object Info Session

SQL Editor

```

9
10 • create table BRANCH(branch_name varchar(20),branch_city varchar(10),assets real,primary key(branch_name));
11 • insert into BRANCH values('SBI_chamrajpet','Bangalore',50000);
12 • insert into BRANCH values('SBI_Residency road','Bangalore',10000);
13 • insert into BRANCH values('SBI_shivajiroad','Bombay',20000);
14 • insert into BRANCH values('SBI_parliamentroad','Delhi',10000);
15 • insert into BRANCH values('SBI_jantarmantar','Delhi',20000);
16 • commit;
17 • select * from BRANCH;

```

Result Grid

| branch_name | branch_city | assets |
|--------------------|-------------|--------|
| SBI_chamrajpet | Bangalore | 50000 |
| SBI_jantarmantar | Delhi | 20000 |
| SBI_parliamentroad | Delhi | 10000 |
| SBI_Residency road | Bangalore | 10000 |
| SBI_shivajiroad | Bombay | 20000 |

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|---|----------|------------------------------------|---|-----------------------|
| 1 | 10:59:39 | select * from BRANCH LIMIT 0, 1000 | Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH... | 0.000 sec |
| 2 | 10:59:46 | use banking | 0 row(s) affected | 0.000 sec |
| 3 | 10:59:55 | select * from BRANCH LIMIT 0, 1000 | 5 row(s) returned | 0.015 sec / 0.000 sec |

SQLAdditions

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Information

No object selected

Object Info Session

SQL Editor

```

24 • insert into ACCOUNTS values('6','SBI_shivajiroad','4000');
25 • insert into ACCOUNTS values('8','SBI_Residency road','4000');
26 • insert into ACCOUNTS values('9','SBI_parliamentroad','3000');
27 • insert into ACCOUNTS values('10','SBI_Residency road','5000');
28 • insert into ACCOUNTS values('11','SBI_jantarmantar','2000');
29 • commit;
30 • select * from ACCOUNTS;
31 • create table BANKCUST(customername varchar(20),customerstreet varchar(30),customercity varchar(30),primary key(customername));
32 • insert into BANKCUST values('AVINASH','Bullemple','Bangalore');

```

Result Grid

| branch_name | branch_city | assets |
|--------------------|-------------|--------|
| SBI_chamrajpet | Bangalore | 50000 |
| SBI_jantarmantar | Delhi | 20000 |
| SBI_parliamentroad | Delhi | 10000 |
| SBI_Residency road | Bangalore | 10000 |
| SBI_shivajiroad | Bombay | 20000 |

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|---|----------|------------------------------------|---|-----------------------|
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Information

No object selected

Object Info Session

SQL Editor

```

36 • insert into BANKCUST values('ravi','akbarroad','delhi');
37 •
38 • select * from BANKCUST;
39 • create table DEPOSIT(customername varchar(20),accno integer,primary key(accno,customername),foreign key(accno) references ACCOUNTS(accno),fo
40 •
41 • insert into DEPOSIT values('AVINASH',1);
42 • insert into DEPOSIT values('dinesh',2);
43 • insert into DEPOSIT values('nikhil',4);
44 • insert into DEPOSIT values('ravi',5);

```

Result Grid

| customername | customerstreet | customercity |
|--------------|----------------|--------------|
| AVINASH | Bultemple | Bangalore |
| dinesh | banerghata | Bangalore |
| mohan | mrgoad | Bangalore |
| nikhil | churdstreet | Delhi |
| ravi | akbarroad | Delhi |

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|---|----------|--------------------------------------|---|-----------------------|
| 1 | 10:59:39 | select * from BRANCH LIMIT 0, 1000 | Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH... | 0.000 sec |
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| 3 | 10:59:55 | select * from BRANCH LIMIT 0, 1000 | 5 row(s) returned | 0.015 sec / 0.000 sec |
| 4 | 11:00:16 | select * from BANKCUST LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |

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No object selected

Object Info Session

SQL Editor

```

45 • insert into DEPOSIT values('AVINASH',8);
46 • insert into DEPOSIT values('nikhil',9);
47 • insert into DEPOSIT values('dinesh',10);
48 • insert into DEPOSIT values('nikhil',11);
49 • commit;
50 • select * from DEPOSIT;
51 • CREATE TABLE LOAN(loanno int,branch_name varchar(20),amt real,primary key(loanno),foreign key(branch_name) references BRANCH(branch_name));
52 • insert into LOAN values(1,'SBI_Chemrajpet',1000);
53 • insert into LOAN values(2,'SBI_Residency road',2000);

```

Result Grid

| customername | accno |
|--------------|-------|
| AVINASH | 1 |
| AVINASH | 8 |
| dinesh | 2 |
| dinesh | 10 |
| nikhil | 4 |
| nikhil | 9 |
| nikhil | 11 |

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|---|----------|--------------------------------------|---|-----------------------|
| 1 | 10:59:39 | select * from BRANCH LIMIT 0, 1000 | Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH... | 0.000 sec |
| 2 | 10:59:46 | use banking | 0 row(s) affected | 0.000 sec |
| 3 | 10:59:55 | select * from BRANCH LIMIT 0, 1000 | 5 row(s) returned | 0.015 sec / 0.000 sec |
| 4 | 11:00:16 | select * from BANKCUST LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 5 | 11:00:24 | select * from DEPOSIT LIMIT 0, 1000 | 8 row(s) returned | 0.000 sec / 0.000 sec |

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Information

No object selected

Object Info Session

SQL Editor

```

54 insert into LOAN values(3,'SBI_shivajiroad',3000);
55 insert into LOAN values(4,'SBI_parliamentroad',4000);
56 insert into LOAN values(5,'SBI_jantarmantra',5000);
57 commit;
58 select * from LOAN;
59 /*Find all the customers who have at least two accounts at the Main branch (ex.
60 SBI_ResidencyRoad).
61 iv. Find all the customers who have an account at all the branches located in a
62 specific city (Ex. Delhi).

```

Result Grid

| loanno | branch_name | amt |
|--------|--------------------|------|
| 1 | SBI_Chamrapet | 1000 |
| 2 | SBI_Residency road | 2000 |
| 3 | SBI_shivajiroad | 3000 |
| 4 | SBI_parliamentroad | 4000 |
| 5 | SBI_jantarmantra | 5000 |

LOAN 4 x

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|---|----------|--------------------------------------|---|-----------------------|
| 1 | 10:59:39 | select * from BRANCH LIMIT 0, 1000 | Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH... | 0.000 sec |
| 2 | 10:59:46 | use banking | 0 row(s) affected | 0.000 sec |
| 3 | 10:59:55 | select * from BRANCH LIMIT 0, 1000 | 5 row(s) returned | 0.015 sec / 0.000 sec |
| 4 | 11:00:16 | select * from BANKCUST LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 5 | 11:00:24 | select * from DEPOSIT LIMIT 0, 1000 | 8 row(s) returned | 0.000 sec / 0.000 sec |
| 6 | 11:00:38 | select * from LOAN LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |

SQLAdditions

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Information

No object selected

Object Info Session

SQL Editor

```

63 v. Demonstrate how you delete all account tuples at every branch located in
64 a specific city (Ex. Bombay). */
65 /**/
66 select customername from DEPOSIT d,ACCOUNTS a
67 where d.accto=a.accto
68 group by customername
69 having count(d.customername) >=2;
70 /**/
71 delete from ACCOUNTS

```

Result Grid

| customername |
|--------------|
| AVDIASH |
| dhresh |
| nikhil |

Result 5 x

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|---|----------|--|---|-----------------------|
| 1 | 10:59:39 | select * from BRANCH LIMIT 0, 1000 | Error Code: 1046. No database selected Select the default DB to be used by double-clicking its name in the SCH... | 0.000 sec |
| 2 | 10:59:46 | use banking | 0 row(s) affected | 0.000 sec |
| 3 | 10:59:55 | select * from BRANCH LIMIT 0, 1000 | 5 row(s) returned | 0.015 sec / 0.000 sec |
| 4 | 11:00:16 | select * from BANKCUST LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 5 | 11:00:24 | select * from DEPOSIT LIMIT 0, 1000 | 8 row(s) returned | 0.000 sec / 0.000 sec |
| 6 | 11:00:38 | select * from LOAN LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 7 | 11:01:55 | select customername from DEPOSIT d,ACCOUNTS a where d.accto=a.accto group by customername having ... | 3 row(s) returned | 0.000 sec / 0.000 sec |

SQLAdditions

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Information

No object selected

Object Info Session

SQL Editor

```
66 select customername from DEPOSIT d,ACCOUNTS a
67 where d.accto=a.accto
68 group by customername
69 having count(d.customername) >=2;
70 /**/
71 delete from ACCOUNTS
72 where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='Bombay');
73 select * from ACCOUNTS;
74 /**/
```

Result Grid

| accto | branch_name | balance |
|-------|--------------------|---------|
| 1 | SBI_Chemrapet | 2000 |
| 2 | SBI_Residency road | 5000 |
| 4 | SBI_parliamentroad | 9000 |
| 5 | SBI_jantarantar | 8000 |
| 8 | SBI_Residency road | 4000 |
| 9 | SBI_parliamentroad | 3000 |
| 10 | cit Basdevanv road | 6000 |

ACCOUNTS 6 x

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|---|----------|--|--|-----------------------|
| 1 | 10:59:39 | select * from BRANCH LIMIT 0, 1000 | Error Code: 1046. No database selected. Select the default DB to be used by double-clicking its name in the SCH... | 0.000 sec |
| 2 | 10:59:46 | use banking | 0 row(s) affected | 0.000 sec |
| 3 | 10:59:55 | select * from BRANCH LIMIT 0, 1000 | 5 row(s) returned | 0.015 sec / 0.000 sec |
| 4 | 11:00:16 | select * from BANKCUST LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 5 | 11:00:24 | select * from DEPOSIT LIMIT 0, 1000 | 8 row(s) returned | 0.000 sec / 0.000 sec |
| 6 | 11:00:38 | select * from LOAN LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 7 | 11:01:55 | select customername from DEPOSIT d,ACCOUNTS a where d.accto=a.accto group by customername having ... | 3 row(s) returned | 0.000 sec / 0.000 sec |
| 8 | 11:02:14 | delete from ACCOUNTS where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='B... | 0 row(s) affected | 0.000 sec |
| 9 | 11:02:14 | Select * from ACCOUNTS LIMIT 0, 1000 | 8 row(s) returned | 0.000 sec / 0.000 sec |

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Information

No object selected

Object Info Session

SQL Editor

```
75 select d.customername from DEPOSIT d,BRANCH b,ACCOUNTS a
76 where b.branch_name=a.branch_name
77 AND a.accto=d.accto
78 and branch_city='Delhi'
79 group by d.customername
80 HAVING COUNT(distinct b.branch_name)=(
81 SELECT COUNT(branch_name)
82 FROM branch
83 WHERE branch_city='Delhi');
```

Result Grid

| customername |
|--------------|
| nikhil |

Result 7 x

Output

Action Output

| # | Time | Action | Message | Duration / Fetch |
|----|----------|--|-------------------|-----------------------|
| 2 | 10:59:46 | use banking | 0 row(s) affected | 0.000 sec |
| 3 | 10:59:55 | select * from BRANCH LIMIT 0, 1000 | 5 row(s) returned | 0.015 sec / 0.000 sec |
| 4 | 11:00:16 | select * from BANKCUST LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 5 | 11:00:24 | select * from DEPOSIT LIMIT 0, 1000 | 8 row(s) returned | 0.000 sec / 0.000 sec |
| 6 | 11:00:38 | select * from LOAN LIMIT 0, 1000 | 5 row(s) returned | 0.000 sec / 0.000 sec |
| 7 | 11:01:55 | select customername from DEPOSIT d,ACCOUNTS a where d.accto=a.accto group by customername havin... | 3 row(s) returned | 0.000 sec / 0.000 sec |
| 8 | 11:02:14 | delete from ACCOUNTS where branch_name IN(SELECT branch_name FROM branch WHERE branch_city='... | 0 row(s) affected | 0.000 sec |
| 9 | 11:02:14 | Select * from ACCOUNTS LIMIT 0, 1000 | 8 row(s) returned | 0.000 sec / 0.000 sec |
| 10 | 11:02:25 | select d.customername from DEPOSIT d,BRANCH b,ACCOUNTS a where b.branch_name=a.branch_name A... | 1 row(s) returned | 0.000 sec / 0.000 sec |